Climate change beliefs and savings behavior: a macroeconomic perspective

Hannah Römer

October 30, 2025

University of Oxford

Motivation: anticipation of climate change impacts

Climate change is a major challenge of our time.

- Estimated GDP loss of 1°C of warming: 1.2% Burke et al. (2015), 12% Bilal (2024)
- People's Climate Vote 2024: 76% globally worry about effects on next generations (87% in UK)

Motivation: anticipation of climate change impacts

Climate change is a major challenge of our time.

- Estimated GDP loss of 1°C of warming: 1.2% Burke et al. (2015), 12% Bilal (2024)
- People's Climate Vote 2024: 76% globally worry about effects on next generations (87% in UK)

Limited scope for individual actions

➢ Savings as self-insurance?

Motivation: anticipation of climate change impacts

Climate change is a major challenge of our time.

- Estimated GDP loss of 1°C of warming: 1.2% Burke et al. (2015), 12% Bilal (2024)
- People's Climate Vote 2024: 76% globally worry about effects on next generations (87% in UK)

Limited scope for individual actions

➢ Savings as self-insurance?

What are the macroeconomic implications of climate change beliefs?

Motivation: anticipation of climate change impacts

Climate change is a major challenge of our time.

- Estimated GDP loss of 1°C of warming: 1.2% Burke et al. (2015), 12% Bilal (2024)
- People's Climate Vote 2024: 76% globally worry about effects on next generations (87% in UK)

Limited scope for individual actions

➢ Savings as self-insurance?

What are the macroeconomic implications of climate change beliefs?

- Do beliefs over climate change affect individual savings?
- Does the effect on capital accumulation lead to with macroeconomic consequences?
- Does disagreement over climate impacts matter for aggregate or distributional outcomes?

This paper: micro to macro

Micro behavior: Do climate beliefs affect individual savings?

Macro effects: Do climate beliefs matter for aggregate and distributional outcomes?

This paper: micro to macro

Micro behavior: Do climate beliefs affect individual savings?

- Partial equilibrium consumption-savings model
  - Analytical expression for savings response to change in climate change beliefs
- Empirical evidence from UK
  - Observational: representative UK panel survey
  - Causal: specific purpose online questionnaire

Macro effects: Do climate beliefs matter for aggregate and distributional outcomes?

This paper: micro to macro

Micro behavior: Do climate beliefs affect individual savings?

- Partial equilibrium consumption-savings model
  - Analytical expression for savings response to change in climate change beliefs
- Empirical evidence from UK
  - Observational: representative UK panel survey
  - Causal: specific purpose online questionnaire

Macro effects: Do climate beliefs matter for aggregate and distributional outcomes?

- Non-stationary general equilibrium model with incomplete markets and aggregate risk
  - Climate change as shift in stochastic productivity process
  - Uncertainty over trend in productivity
  - Heterogeneity in income, wealth and beliefs

Key take-aways: The effects of climate change beliefs

Micro behavior: Climate beliefs affect both individual savings...

Macro effects: ...and macroeconomic outcomes along the transition to more frequent exposure.

Key take-aways: The effects of climate change beliefs

Micro behavior: Climate beliefs affect both individual savings...

- Theory
  - ➢ Higher concern over productivity impacts increases savings
  - ➢ Non-monotone dependence on idiosyncratic state
- Empirical evidence
  - ➢ Significant positive relationship between climate change beliefs and savings choices: Likelihood to save +9pp, savings share +1pp
  - ➢ Not fully attributable to preferences or exposure

Macro effects: ...and macroeconomic outcomes along the transition to more frequent exposure.

Key take-aways: The effects of climate change beliefs

Micro behavior: Climate beliefs affect both individual savings...

- Theory
  - ➢ Higher concern over productivity impacts increases savings
  - ➢ Non-monotone dependence on idiosyncratic state
- Empirical evidence
  - ➢ Significant positive relationship between climate change beliefs and savings choices: Likelihood to save +9pp, savings share +1pp
  - ➢ Not fully attributable to preferences or exposure

Macro effects: ...and macroeconomic outcomes along the transition to more frequent exposure.

- ➢ Climate concern effect: capital ↑, output loss from climate change ↓
  NPV of output: +12% under accurate initial beliefs
- ➢ Benefits the poor disproportionally: wealth inequality ↓ temporarily
- ➢ Small but persistent negative impacts of disagreement

Literature and contributions

Climate change impacts on the macroeconomy

- Stochastic damages: Golosov et al. (2014), Cai and Lontzek (2019)
- Anticipation: Bilal and Rossi-Hansberg (2023), Bakkensen and Barrage (2022)

Contribution: Amplified consequences of uncertainty in decentralized framework

Literature and contributions

Climate change impacts on the macroeconomy

- Stochastic damages: Golosov et al. (2014), Cai and Lontzek (2019)
- Anticipation: Bilal and Rossi-Hansberg (2023), Bakkensen and Barrage (2022)

Contribution: Amplified consequences of uncertainty in decentralized framework

Beliefs and disagreement over aggregate (climate) process

- Hong et al. (2023), Bakkensen et al. (2023), Chen et al. (2012), Lontzek et al. (2024)

Contribution: Implications along the transition path

Literature and contributions

Climate change impacts on the macroeconomy

- Stochastic damages: Golosov et al. (2014), Cai and Lontzek (2019)
- Anticipation: Bilal and Rossi-Hansberg (2023), Bakkensen and Barrage (2022)

Contribution: Amplified consequences of uncertainty in decentralized framework

Beliefs and disagreement over aggregate (climate) process

- Hong et al. (2023), Bakkensen et al. (2023), Chen et al. (2012), Lontzek et al. (2024)

Contribution: Implications along the transition path

Incomplete markets and aggregate risks: theory and computation

- Krusell and Smith (1998), Farhi et al. (2022), Broer et al. (2022), Fernández-Villaverde et al. (2023), Bilal (2023), Auclert et al. (2021), Moll (2024),

Contribution: Non-stationarity in aggregate process, global solution method

Predictions in partial equilibrium

Savings response to a change in climate change beliefs

Choose consumption to maximize expected life-time utility, subject to budget constraint.

Savings response to a change in climate change beliefs

Choose consumption to maximize expected life-time utility, subject to budget constraint.

Two types of uncertainty affect income:

- Aggregate state: productivity
  - ➢ Pins down average wages and asset returns
  - ➢ Possibly dependent on climate change
- Idiosyncratic state: demographics, asset holdings
  - ➢ Affects personal labor income
  - ➢ Independent of climate change

Savings response to a change in climate change beliefs

Choose consumption to maximize expected life-time utility, subject to budget constraint.

Two types of uncertainty affect income:

- Aggregate state: productivity
  - ➢ Pins down average wages and asset returns
  - ➢ Possibly dependent on climate change
- Idiosyncratic state: demographics, asset holdings
  - ➢ Affects personal labor income
  - ➢ Independent of climate change

How do savings depend on beliefs over climate change?

- ➤ How do consumption choices respond to changes in perceived probabilities of aggregate states?
- ➤ First order response to changes in beliefs from Euler equation (cf. Farhi et al., 2022)

First order consumption response

Perturbation in $p_1 = \mathbb{P}(\text{low productivity in } t = 1)$ affects consumption choice in period 0:

$$\frac{dc_0}{c_0} = -\varepsilon(c_0) \cdot MPS_0 \cdot \mathcal{D}_0 \; dp_1$$

First order consumption response

Perturbation in $p_1 = \mathbb{P}(\text{low productivity in } t = 1)$ affects consumption choice in period 0:

$$\frac{dc_0}{c_0} = -\varepsilon(c_0) \cdot \boxed{MPS_0} \cdot \mathcal{D}_0 \; dp_1$$

- *MPS*: Marginal propensity to save

First order consumption response

Perturbation in $p_1 = \mathbb{P}(\text{low productivity in } t = 1)$ affects consumption choice in period 0:

$$\frac{dc_0}{c_0} = -\varepsilon(c_0) \cdot MPS_0 \cdot \mathcal{D}_0 \; dp_1$$

- MPS: Marginal propensity to save
- $\mathcal{D}$: Difference between expected marginal value of wealth in low versus high state

First order consumption response

Perturbation in $p_1 = \mathbb{P}(\text{low productivity in } t = 1)$ affects consumption choice in period 0:

$$\frac{dc_0}{c_0} = -\varepsilon(c_0) \cdot MPS_0 \cdot \mathcal{D}_0 \, dp_1$$

- MPS: Marginal propensity to save
- $\mathcal{D}$: Difference between expected marginal value of wealth in low versus high state
- $\varepsilon(c)$: Elasticity of intertemporal substitution

First order consumption response

Perturbation in $p_1 = \mathbb{P}$(low productivity in $t = 1$) affects consumption choice in period 0:

$$\frac{dc_0}{c_0} = -\varepsilon(c_0) \cdot MPS_0 \cdot \mathcal{D}_0 \; dp_1$$

- MPS: Marginal propensity to save
  $\rightarrow$ Small if borrowing constrained
- $\mathcal{D}$: Difference between expected marginal value of wealth in low versus high state
  $\rightarrow$ High for low asset holding, low expected income
  $\rightarrow$ Amplified by incomplete markets
- $\varepsilon(c)$: Elasticity of intertemporal substitution

First order consumption response

Perturbation in $p_1 = \mathbb{P}$(low productivity in $t = 1$) affects consumption choice in period 0:

$$\frac{dc_0}{c_0} = -\varepsilon(c_0) \cdot MPS_0 \cdot \mathcal{D}_0 \; dp_1$$

- MPS: Marginal propensity to save
  $\rightarrow$ Small if borrowing constrained
- $\mathcal{D}$: Difference between expected marginal value of wealth in low versus high state
  $\rightarrow$ High for low asset holding, low expected income
  $\rightarrow$ Amplified by incomplete markets
- $\varepsilon(c)$: Elasticity of intertemporal substitution

Responses to perturbations in future probabilities $dp_t, \; t > 1$

- History-dependence and risk-adjusted measure over idiosyncratic states

First order consumption response

Perturbation in $p_1 = \mathbb{P}(\text{low productivity in } t = 1)$ affects consumption choice in period 0:

$$\frac{dc_0}{c_0} = -\varepsilon(c_0) \cdot MPS_0 \cdot \mathcal{D}_0 \; dp_1$$

- *MPS*: Marginal propensity to save
  $\rightarrow$ Small if borrowing constrained
- $\mathcal{D}$: Difference between expected marginal value of wealth in low versus high state
  $\rightarrow$ High for low asset holding, low expected income
  $\rightarrow$ Amplified by incomplete markets
- $\varepsilon(c)$: Elasticity of intertemporal substitution

Responses to perturbations in future probabilities $dp_t, \; t > 1$

- History-dependence and risk-adjusted measure over idiosyncratic states

Take-aways:

1. Concern over adverse macro risks increases individual savings
2. Opposing forces of current idiosyncratic state

Empirical evidence

Empirical support for theoretical predictions

Model predictions:

- Climate change concern increases savings
- Heterogeneity across population

Empirical support for theoretical predictions

Model predictions:

- ➤ Climate change concern increases savings
- ➤ Heterogeneity across population

Test these predictions in the data

- Measure of climate change concern matched with savings choices
- Controls for demographics, in particular income
- Challenges: unobserved characteristics, e.g. preferences

Empirical support for theoretical predictions

Model predictions:

- ➤ Climate change concern increases savings
- ➤ Heterogeneity across population

Test these predictions in the data

- Measure of climate change concern matched with savings choices
- Controls for demographics, in particular income
- Challenges: unobserved characteristics, e.g. preferences

Two types of UK survey evidence:

1. Observational: large, representative UK panel survey
2. Causal: specific purpose online questionnaire

Observational data

UK Longitudinal Household Survey, waves 4 and 10 (2012-13, 2018-19)

- Construct index about climate change concern
- Savings variables (binary and amount)
- Demographic indicators
  - education, income, residence (LSOA), age, children

Exposure

- Flood data matched on residence

Observational data

UK Longitudinal Household Survey, waves 4 and 10 (2012-13, 2018-19)

- Construct index about climate change concern
- Savings variables (binary and amount)
- Demographic indicators
  - education, income, residence (LSOA), age, children

Exposure

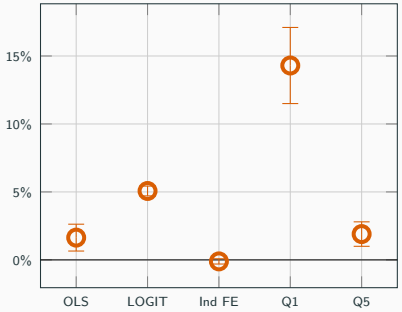
- Flood data matched on residence

Addresses two main concerns:

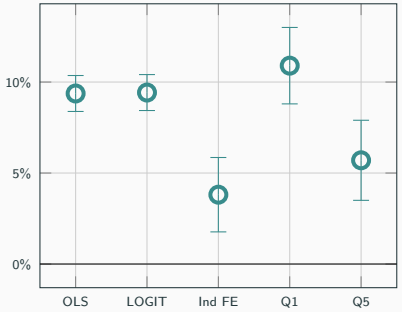
1. Preferences over risk and time $\rightarrow$ Individual fixed effects
2. Idiosyncratic exposure $\rightarrow$ Flood exposure, area fixed effects

Empirical results

Intensive margin
Increase in savings share



Extensive margin
Increase in Likelihood to save



Specific purpose online survey

Goal: obtain causal evidence by using within-subject design (cf. Andre et al., 2025)
Hypothetical savings choice: How much would you save out of a 5000 GBP transfer?

➢ Under each of 2 different climate change scenarios, presented in random order

Specific purpose online survey

Goal: obtain causal evidence by using within-subject design (cf. Andre et al., 2025)
Hypothetical savings choice: How much would you save out of a 5000 GBP transfer?

➢ Under each of 2 different climate change scenarios, presented in random order

Questionnaire

➢ on overall concern, beliefs over specific mechanisms, personal savings behavior

Key statistic: relative effect of scenario on marginal savings $\Delta s = \frac{\text{Saved}(A) - \text{Saved}(B)}{\text{Saved}(B)}$

Specific purpose online survey

Goal: obtain causal evidence by using within-subject design (cf. Andre et al., 2025)
Hypothetical savings choice: How much would you save out of a 5000 GBP transfer?

➢ Under each of 2 different climate change scenarios, presented in random order

Questionnaire

➢ on overall concern, beliefs over specific mechanisms, personal savings behavior

Key statistic: relative effect of scenario on marginal savings $\Delta s = \frac{\text{Saved}(A) - \text{Saved}(B)}{\text{Saved}(B)}$

	Full sample
Δs	$7.6\%^{***}$
Observations	543

	Income	
low	medium	high
$10.0\%^{***}$	$7.2\%^{**}$	5.3%
178	230	81

Survey design Sample Questionnaire

Take-aways and open questions

Key take-aways:

- Passthrough of adverse aggregate risks: savings $\uparrow$, depending on idiosyncratic state
- Empirical evidence for relationship between climate concern and savings choices

Take-aways and open questions

Key take-aways:

- Passthrough of adverse aggregate risks: savings $\uparrow$, depending on idiosyncratic state
- Empirical evidence for relationship between climate concern and savings choices

Open question: Do climate change beliefs matter for the macroeconomy?

- How does additional capital accumulation affect output losses during climate transition?
- Does the observed disagreement over climate change matter for macroeconomic outcomes?

$\rightarrow$ Dynamic general equilibrium model

General Equilibrium Model

General Equilibrium model

Households

- are subject to idiosyncratic shocks: income and life-cycle;
- consume and save to maximize EU, given budget constraint and borrowing limit.

Representative firm

- produces using capital and labor;
- pays wages and interest;
- is subject to productivity shocks $\zeta_t \in \{\zeta^L, \zeta^H\},\ \zeta^L < \zeta^H$.

Market clearing

- implies aggregate capital equals households' asset holdings.

General Equilibrium model

Households

- are subject to idiosyncratic shocks: income and life-cycle;
- consume and save to maximize EU, given budget constraint and borrowing limit.

Representative firm

- produces using capital and labor;
- pays wages and interest;
- is subject to productivity shocks $\zeta_t \in \{\zeta^L, \zeta^H\},\ \zeta^L < \zeta^H$.

Market clearing

- implies aggregate capital equals households' asset holdings.

Climate change

- causes non-stationary, exogenous shift in global temperature:

$$T_{t+1} = \nu T_t + (1-\nu)\mu_T \quad \text{for} \quad t \geq 0;$$

- which may affect the frequency of low productivity states and is known at time $t = 0$.

Climate change impacts

Probability of adverse aggregate shock is given by $\mathbb{P}(\zeta_t = \zeta^L) = p^{1-\gamma T_t}$ with unknown parameter γ

- Two possible states of the world: $\gamma \in \{0, \overline{\gamma}\}$
- Individual initial belief $\pi_{it} = \mathbb{P}_0(\gamma = \overline{\gamma})$
- Bayesian updating

Climate change impacts

Probability of adverse aggregate shock is given by $\mathbb{P}(\zeta_t = \zeta^L) = p^{1-\gamma T_t}$ with unknown parameter γ

- Two possible states of the world: $\gamma \in \{0, \overline{\gamma}\}$
- Individual initial belief $\pi_{it} = \mathbb{P}_0(\gamma = \overline{\gamma})$
- Bayesian updating

Impacts modeled via measure, not sample space of aggregate process

- All realizations possible under all beliefs
- Implicit level effect

Baseline: $\gamma = \overline{\gamma}$ is the true model.

Consumer problem

Aggregate capital is both endogenous outcome and input for decision of forward looking consumer.

Consumer problem

Aggregate capital is both endogenous outcome and input for decision of forward looking consumer.

Assumption: bounded rationality

Decisions are based on Perceived Law of Motion (PLM)

$$K' = \mathcal{H}(K; \mathcal{X}) \quad \text{for some explanatory variables } \mathcal{X}.$$

Consumer problem

Aggregate capital is both endogenous outcome and input for decision of forward looking consumer.

Assumption: bounded rationality

Decisions are based on Perceived Law of Motion (PLM)

$$K' = \mathcal{H}(K; \mathcal{X}) \quad \text{for some explanatory variables } \mathcal{X}.$$

How to choose PLM?

1. Find self-justified equilibrium to approximate rational expectations (Krusell and Smith, 1998)
   - Estimate $\mathcal{H}$ on simulated data, iterate until convergence
   - In stationary setting: log-linear $\mathcal{H}$, $\mathcal{X} = \zeta$ performs well

   $\rightarrow$ extend idea to non-stationary framework
2. Alternative to address Moll (2024) critique: adaptive expecations, with and without learning

PLM estimation

Fix some functional form

- ➢ Obvious candidates for $\mathcal{X}$: shock ζ, temperature T, personal belief π
- ➢ Guess for $\mathcal{H}$
  - linear in $\pi \rightarrow$ only estimate for $\pi \in \{0, 1\}$
  - log-linear in K with coefficients depending on ζ and T

PLM estimation

Fix some functional form

- ➢ Obvious candidates for $\mathcal{X}$: shock ζ, temperature T, personal belief π
- ➢ Guess for $\mathcal{H}$
  - linear in $\pi \rightarrow$ only estimate for $\pi \in \{0, 1\}$
  - log-linear in K with coefficients depending on ζ and T

Generate simulated data

- ➢ Non-stationarity: ensemble of shock sequences
  - Stratified sample: Match theoretical averages within each period
  - Preserves intratemporal, but decreases intertemporal variance in key summary statistics

Iterate on parameters until convergence. Validate with alternative initial distribution.

Model selection | Stratification procedure | Alternative algorithm: adaptive expectations with learning

Equilibrium and comparative statics

For period t: Ψ_t distribution of agents over demographics, asset holdings and beliefs.

Dynamic equilibrium

For a given (a) aggregate draw, (b) initial distribution Ψ_0 and (c) PLM $\mathcal{H}$, the *dynamic equilibrium* of the economy is given by a sequence of distributions $\{\Psi_t\}_{t\geq 0}$ so that:

1. Each period, households and firms optimize given their beliefs; markets clear.
2. Ψ_t evolves according to (i) law of motion for demographics, (ii) savings choices, and (iii) Bayes' formula.

Equilibrium and comparative statics

For period t: Ψ_t distribution of agents over demographics, asset holdings and beliefs.

Dynamic equilibrium

For a given (a) aggregate draw, (b) initial distribution Ψ_0 and (c) PLM $\mathcal{H}$, the *dynamic equilibrium* of the economy is given by a sequence of distributions $\{\Psi_t\}_{t\geq 0}$ so that:

1. Each period, households and firms optimize given their beliefs; markets clear.
2. Ψ_t evolves according to (i) law of motion for demographics, (ii) savings choices, and (iii) Bayes' formula.

Summary statistics

- Stochastic Steady State
- Ensemble averages

Calibration

Earnings and life-cycle:

- AR(1) process for skills estimated on UK panel data
- Expected duration working life (retirement): 40 (20) years; replacement rate 60%

Aggregate shocks: Effect of climate change on UK productivity

- AR(1) process for temperature, long-run increase of 0.9 deg within 75 years.
- Meta study Rising et al. (2022) estimates output losses:

$$1.1\% \text{ in } 2022,\ 3.3\% \text{ by } 2050,\ 7.4\% \text{ by } 2100$$

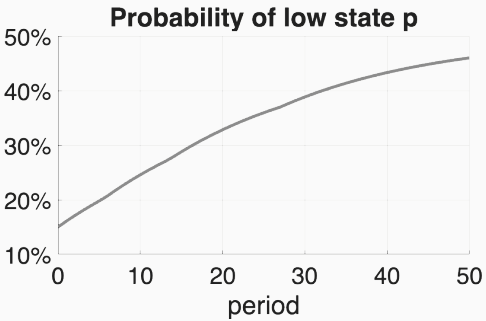
- Bad states $p_0 = 0.15$, $\zeta^L = 0.93$:

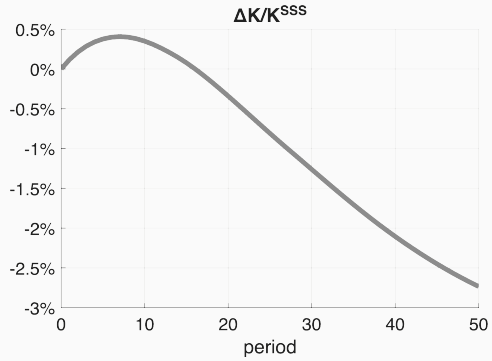
$$\mathbb{E}(\zeta_0) = 0.9895,\ \mathbb{E}(\zeta_{100}) = 0.965$$

Model results

The climate transition under accurate beliefs

At time $t = 0$, everyone becomes aware of the shift in temperature and knows $\gamma = \overline{\gamma}$

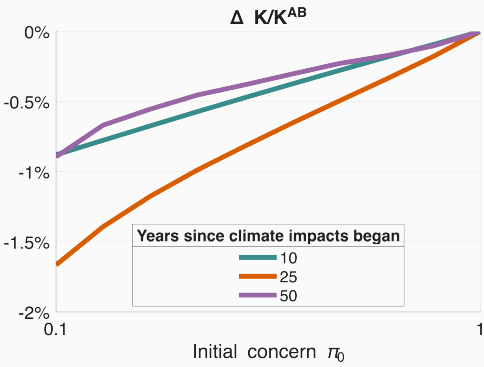


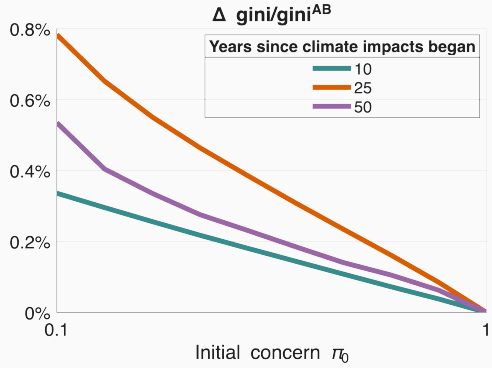


Increased savings in short run $\rightarrow$ smoothed transition

Capital accumulation under homogeneous beliefs

Inaccurate prior: capital ↓, inequality ↑



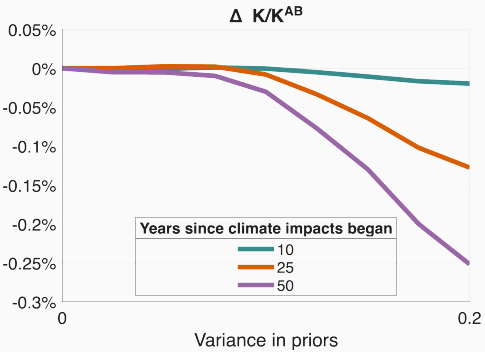


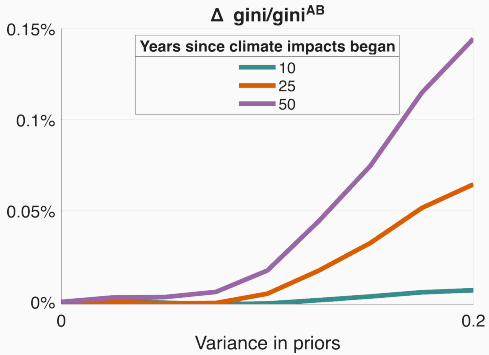
As long as prior $\pi > 0$: learning and long-run convergence.

For $\pi = 0$: long run divergence

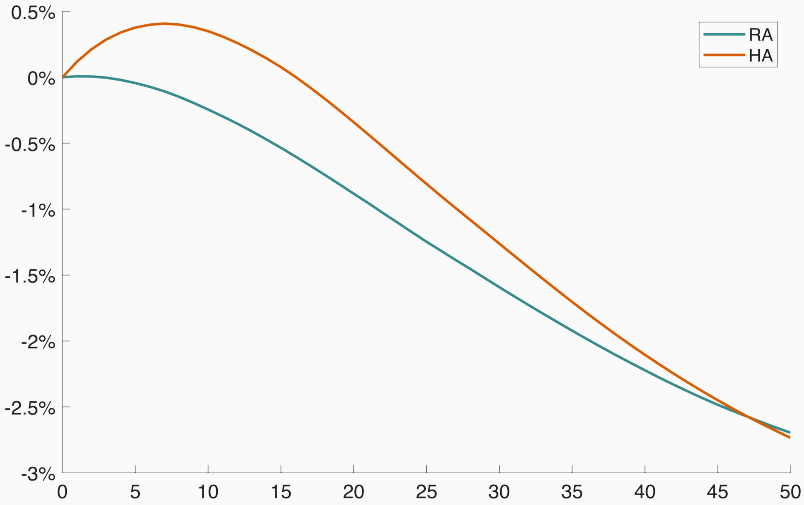
Capital accumulation under dispersed beliefs

Small effect of disagreement, but persistent.





Mechanisms: The role of incomplete markets



Conclusion: Beliefs over climate change matter for the macroeconomy.

Micro behavior

- Climate concern affects individual savings decisions
- Consistent with a model of aggregate climate damages
- Cross-sectional heterogeneity rationalized by borrowing constraint

Macro effects

- Climate concern effect: capital increases in short-run, attenuates climate damages
- Heterogeneous impacts: high capital disproportionally benefits poor
- Disagreement plays small but persistent role

Beliefs over aggregate risks in incomplete markets

- Development and solution of non-stationary model
- Applicable to range of questions on uncertainty and disagreement over structural shifts

References

Andre, P., Flynn, J. P., Nikolakoudis, G. and Sastry, K. (2025), 'Quick-fixing: Near-rationality in consumption and savings behavior', *NBER Working Paper Series* .

Auclert, A., Bardóczy, B., Rognlie, M. and Straub, L. (2021), 'Using the sequence-space jacobian to solve and estimate heterogeneous-agent models', *Econometrica* **89**, 2375–2408.

Bakkensen, L. A. and Barrage, L. (2022), 'Going underwater? flood risk belief heterogeneity and coastal home price dynamics', *The Review of Financial Studies* **35**, 3666–3709.
URL: *https://doi.org/10.1093/rfs/hhab122*

Bakkensen, L., Phan, T. and Wong, T.-N. (2023), 'Leveraging the disagreement on climate change: Theory and evidence', *Federal Reserve Bank of Richmond Working Papers* **23**, 1–75.

Bilal, A. (2023), 'Solving heterogeneous agent models with the master equation', *NBER Working Paper Series* .

Bilal, A. (2024), *The Macroeconomic Impact of Climate Change: Global vs. Local Temperature*, National Bureau of Economic Research.

Bilal, A. and Rossi-Hansberg, E. (2023), Anticipating climate change across the united states, Technical report, National Bureau of Economic Research.
URL: *http://www.nber.org/papers/w31323*

Broer, T., Kohlhas, A., Mitman, K. and Schlafmann, K. (2022), 'Expectation and wealth heterogeneity in the macroeconomy', *CEPR Discussion Paper* .

Burke, M., Hsiang, S. M. and Miguel, E. (2015), 'Global non-linear effect of temperature on economic production', *Nature (London)* **527**, 235–239.

Cai, Y. and Lontzek, T. S. (2019), 'The social cost of carbon with economic and climate risks', *Journal of Political Economy* **127**, 2684–2734.

Chen, H., Joslin, S. and Tran, N.-K. (2012), 'Rare disasters and risk sharing with heterogeneous beliefs', *The Review of Financial Studies* **25**, 2189–2224.
URL: *https://doi.org/10.1093/rfs/hhs064*

Farhi, E., Olivi, H. A. and Werning, I. (2022), Price theory for incomplete markets *, Technical report.

Fernández-Villaverde, J., Hurtado, S. and Nuño, G. (2023), 'Financial frictions and the wealth distribution', *Econometrica* **91**, 869–901.

Golosov, M., Hassler, J., Krusell, P. and Tsyvinski, A. (2014), 'Optimal taxes on fossil fuel in general equilibrium', *Econometrica* **82**, 41–88.
URL: *https://onlinelibrary.wiley.com/doi/abs/10.3982/ECTA10217*

Hong, H., Wang, N. and Yang, J. (2023), 'Mitigating disaster risks in the age of climate change', *Econometrica* **91**, 1763–1802.

Krusell, P. and Smith, A. A. J. (1998), 'Income and wealth heterogeneity in the macroeconomy', *Journal of Political Economy* **106**, 867–896.
URL: *http://www.jstor.org/stable/10.1086/250034*

Lontzek, T., Pohl, W., Schmedders, K., Thalhammer, M., Wilms, O., Allard, A.-F., Bansal, R., Branger, N., Fama, E., Fabisik, K., Gao, C., Hansen, L. P., Judd, K. L., Koijen, R., Nagel, S., Pflueger, C., Pouget, S., Rossi-Hansberg, E., Schneider, C. and Whelan, P. (2024), Asset pricing with disagreement about climate risks *, Technical report.

Moll, B. (2024), The trouble with rational expectations in heterogeneous agent models: A challenge for macroeconomics.

Rising, J., Dietz, S., Dumas, M., Khurana, R., Kikstra, J., Lenton, T., Linsenmeier, M., Smith, C., Taylor, C. and Ward, B. (2022), What will climate change cost the uk? risks, impacts and mitigation for the net-zero transition, Technical report, Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science.

Descriptive Statistics: Index